so in Britain, despite Moir's clear and repeated descriptions of the side effects and complications. Chloroprocaine, undergoing a renaissance in the United States, is dismissed as "inconvenient" by Moir, perhaps reflecting differing modes of practice in Britain. In addition, Moir incorrectly ascribes the rapid breakdown of chloroprocaine to placental enzymes rather than to plasma pseudocholinesterase.

The final chapters of the book are devoted to a discussion of the anesthetic management of various complications of pregnancy and labor and to resuscitation of the newborn. The complications are briefly presented and dogmatism is avoided. The prevention and treatment of aspiration pneumonitis are presented in great detail, but Mendelson is described as a cardiologist, rather than as an obstetrician. Resuscitation of the newborn is dealt with briefly. Inexplicably omitted is any discussion of the significance of meconium in amniotic fluid and of the need for aggressive therapy to prevent the meconium aspiration syndrome in the newborn.

That there are problems in common on both sides of the Atlantic is made clear. Moir advocates the availability of epidural analgesia in all obstetric services, more participation by anesthesiologists in the care of obstetric patients, more extensive use of regional anesthesia for cesarean section, and the training of obstetricians in the administration of conduction anesthesia and the management of its complications. All of these issues are the subject of intense discussion and debate in the United States today, with the addition of the question of the role of nurse anesthetists in obstetric care.

The major strength of this book lies in its detailed description of safe, effective, and generally accepted anesthetic management of the obstetric patient, based upon the major clinical advances of recent years. The importance of avoiding the supine position, the use of antacids, and the putative advantages of newer local anesthetics are appropriately presented. For the beginner or for the individual who seldom cares for a pregnant patient, this book should serve as a convenient source of information. However, the lack of a serious attempt to relate anesthesia to perinatal medicine and to discuss the theoretical and admittedly controversial areas of perinatal pharmacology, in my opinion, makes the book less valuable for the serious student of this special area in anesthesiology.

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Metabolism of Volatile Anesthetics. By E. N. COHEN and R. A. VAN DYKE. Reading, Mass., Addison-Wesley Publishing Co., 1977. Pages: 248. Price: \$18.00.

The authors of this timely book are to be credited with a great deal of temerity. Capturing the essence of the subject of anesthetic biotransformation and toxicity in a single text at one period in time must be comparable to catching an airliner after it has left the airport! Important additions to this field are being made every week in numerous specialty journals of biochemistry, pharmacology, and toxicology, so that merely to collate an overview at one time is almost Sisyphean.

This text is an important contribution to clinical anesthesia, even though its full value to the day-to-day practice of the discipline may be clearer in the future than at present. Many conclusions regarding toxicity are now only in the animal phase and have not as yet been documented in man, although the possibility of correct extrapolation from the animal data is high. The style is quite readable and is not so esoteric as to preclude understanding by the clinical reader, yet is sufficiently comprehensive to appeal to individuals with some sophistication in the area of anesthetic biotrans-

formation. Certainly the chapters concerned with laboratory techniques and assessments of anesthetic metabolism will give the clinical reader insight into the methodology employed in studies of this nature, while they may also serve as a primer for the young investigator in the field.

In summary, this is a well-written text and easily read book surveying the large body of data presently available in the subject. Typographical errors and errors of commission and omission are almost nonexistent. It is recommended for all anesthesiologists who wish to keep abreast of this rapidly moving aspect of the specialty.

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Review of Physiological Chemistry. 16th edition. EDITED BY H. A. HARPER, V. W. RODWELL, and P. A. MAYES. Los Altos, Lange Medical Publications, 1977. Pages: 681, Price: \$13.00.

The editors' intent in this book is to produce a "concise presentation of those aspects of chemistry that are most relevant to the study of biology and medicine." The chapter organization and text reflect this, and the result is a textbook offering a unique view of introductory biochemistry. Most modern biochemistry textbooks are, to a large extent, molecularly oriented, usually being designed for a basic science curriculum. The "whole organ" or "systematic" approach used in this book should be very helpful to persons trying to relate clinical observations to biochemical mechanisms. It is also most valuable for pointing out, to the basic scientist, the clinical relevance of molecular events.

Since this book is subject to more frequent revisions than is common with biochemistry texts, assessment of its merit may be useful to the potential purchaser. The organization has been extensively changed from the preceding edition; reflecting the rapid increase in factual material now considered elementary biochemical information. For example, the chapter on nucleic acids and nucleoproteins has been divided and nearly doubled in length. A new chapter on elementary aspects of immunochemistry also appears, and certain sections are updated; for example, newer techniques of protein sequencing and synthesis are discussed. In contrast, the majority of the information appears to have changed little in content after the reorganization. Many tables and figures are, not surprisingly, unaltered. One aspect that it is hoped will never become obsolete is the current and reasonably extensive bibliography presented with each chapter.

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Life Support—The Essentials. By J. S. Redding. Philadelphia, J. B. Lippincott, 1977. Pages: 136. Price: \$6.25.

Life Support—The Essentials is a paperbound introductory text designed for use by medical students, physicians, and nurses involved in critical care. The book is an outgrowth of a course in life support at the University of South Carolina School of Medicine. It covers such areas as respiratory physiology, airway management, care of the comatose patient, airway emergencies, respiratory therapy, and chronic obstructive pulmonary disease. There are also good chapters on pulmonary edema, drowning, shock, coronary-artery disease, acute respiratory distress syndrome, and cardiopulmonary resuscitation. One of the most interesting chapters considers snake and spider poisonings. The book concentrates on the basics of pathophysiology and manage-

ment and is not referenced, although there is a list of 80 recommended readings at the end.

The only serious omission is the lack of information on intravenous and arterial cannulation techniques, including central venous and pulmonary arterial pressure monitoring. This is certainly an essential aspect of life support and deserves mention in an introductory text such as this. Many will also take issue with the author's dogmatic stance on the exclusive use of metal tracheostomy cannulas, with no mention being made of the availability and advantages of plastic tracheostomy tubes that incorporate controlled pressure cuffs.

Easy reading, this short book is an excellent quick review for someone who has been away from the critical care field.

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Anesthesia and Respiratory Function. EDITED BY E. R. KAFER. Boston, Little, Brown and Company, 1977. Pages: 205. Price: PNS.

This book is a collection of papers dealing with recent advances in specific areas of respiratory physiology and pharmacology. Each is well written, well balanced, well edited, well referenced, modern, of broad scope, and of adequate depth and therefore successful in achieving its particular objective. All of the authors are recognized authorities in their fields of interest.

The first paper discusses the effects of anesthetic drugs and disease on chemical regulation of ventilation, and is of solid interest for all. The second discusses recent advances in the evaluation of respiratory drive and initially repeats material in the first paper, but continues with a good discussion of occlusion pressure and respiratory timing and the effects of anesthetic drugs on these variables. The next paper, a discussion of the neural regulation of respiration, will benefit all requiring updating of their basic science understanding of this subject. The fourth, on recent advances in pulmonary gas exchange, presents the method for determining continuous distribution of ventilation/perfusion ratio, the rationale of the method, and the experimental and theoretical advances in gas exchange that the method provides. It will interest all respiratory physiologists and investigators. The succeeding paper, discussing the mechanical properties of the respiratory system during anesthesia, in addition to being factual, is thoughtful and provocative. The sixth describes recent developments in the physiology of bronchomotor tone and the pharmacology of bronchodilators. It is exceptionally strong in both basic science considerations and clinical relevance, and ends with an exploration of the anesthetic management of the asthmatic patient. The seventh and last paper extensively and in a clinically relevant manner discusses the effects of the total anesthetic experience on respiratory defense mechanisms.

A stronger attempt at correlation of subject matter with clinical practice would have increased the value of the first four papers. I was disappointed to find that recent advances in the physiology of IPPB, PEEP, and IMV and pulmonary vasomotor control had been omitted. Aside from these minor reservations, the book is good value for almost all anesthesiologists willing to keep up with the rapidly expanding information and concepts related to the interaction of anesthesia with respiratory function.

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Pain: A Source Book for Nurses and Other Health Professionals. By A. K. Jacox. Boston, Little, Brown and Company, 1977. Pages: 535. Price: PNS.

This text fulfills its description as a source book on pain for health professionals. Most of the information contained is current and pertinent.

The material is divided into four parts. Part I discusses pain theories, physiologic and psychological mechanisms, and pain measurement. Part II describes the various modalities of therapy available for the relief of chronic pain, including pharmacologic, surgical, stimulative and psychological approaches. Part III discusses the more common pain syndromes, grouped according to etiology. Included in this portion of the text is an excellent chapter on the pain experience in children. Part IV is an annotated cross-reference bibliography of classic and pertinent literature on pain. This bibliography, combined with the references at the end of each chapter, provides a comprehensive index of the major contributions to the literature.

A third of the chapters are reproduced from other publications. This, together with the fact that the text is comprised of individual contributions of many authors, results in considerable repetition. Theories and mechanisms are duplicated in Chapters 1 and 2, psychological contributions to the pain state in 3 and 4, classification of pain in 6 and 15, and stimulation techniques in 7 and 15. The continuity could have been improved by skillful editing.

The chapter on narcotic and non-narcotic analgesics is a compendium of the pharmacologic effects of most of the drugs in current use. The author, however, fails to discuss the problems of habituation and addiction in chronic pain patients or to describe a rational approach to the pharmacologic management of chronic pain.

In Part III, the discussions of management of specific pain entities are well oriented to the nursing professional. Illustrations are few, but contribute significantly to the text.

In general, this book is recommended reading, not only for the allied health professional, but also for the physician who is seeking a single text to provide an overview of both chronic pain mechanisms and management. Here he can also find therapeutic approaches to some specific pain states.

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Pulmonary Aspiration. EDITED BY R. B. ROBERTS. Boston, Little, Brown and Company, 1977. Pages: 153. Price: \$12.00.

This book covers, in eight chapters, each by a different author, the principal aspiration syndromes. It is presented within the current series, *International Anesthesiology Clinics*, volume 15, number 1. Each chapter is independently referenced, and a comprehensive index is provided. Every contributor is a noted authority in the area of expertise covered by his chapter. The book is primarily aimed at the clinician, and as such, provides a useful manual for the practicing anesthesiologist, anesthesiology resident, nurse anesthetist, and others involved with a clinical care of patients at risk from aspiration. However, for those expecting a detailed academic discussion of the underlying pathophysiologic dynamics there is little to excite.

Obviously, in a book comprised of separate independent contributions within related areas, some overlap and redundancy must be expected. Fortunately, for the most part the redundancies serve to emphasize vitally inportant points: the effectiveness of controlled pulmonary ventilation and the appropriate use of posi-